We claim:

1. A wireless device, comprising:

a receiver operable to receive an analog input signal;

an input converting stage coupled to the receiver and operable to convert the analog input signal into a digital input signal;

a filter stage coupled to the digital input signal and operable to generate a filtered digital signal corresponding to a first control signal and a second control signal, the first control signal having a filter coefficient and the second control signal having a signal-to-noise ratio value;

an output converting stage coupled to the filtered digital signal and operable to generate a filtered analog output signal; and

an analysis stage coupled to the input converting stage and the filter stage, the analysis stage being operable to receive the digital input signal from the input converting stage and the filtered digital signal from the filter stage and to generate the first and second control signals.

2. The wireless device of claim 1, wherein the first control signal is generated by a noise suppression filter estimator coupled to the digital input signal in a feed-forward signal path and to the filtered digital signal in a feed-back signal path.

3. The wireless device of claim 2, further comprising an auditory mask estimator coupled between the filtered digital signal and the noise suppression filter estimator that computes an auditory masking level value which is used by the noise suppression filter estimator to generate the first control signal.

4. The wireless device of claim 2, wherein the feed-forward signal path comprises a normalized coherence estimator coupled to the digital input signal that computes a normalized coherence value which is used by the noise suppression filter estimator to generate the first control signal.

5. The wireless device of claim 4, wherein the normalized coherence estimator is also coupled to a signal to noise ratio estimator circuit which generates the second control signal.

6. The wireless device of claim 2, wherein the feed-forward signal path comprises a signal to noise ratio estimator circuit which generates the second control signal, the second control signal being coupled to a normalized coherence estimator that computes a normalized coherence value and a coherence mask that computes a coherence mask value, wherein the normalized coherence value and the coherence mask value are used by the noise suppression filter estimator to generate the first control signal.

7. The wireless device of claim 1, wherein the input converting stage includes an analog to digital converter and a Fast Fourier Transform circuit, the digital input signal comprising frequency domain digital signals.

8. The wireless device of claim 1, wherein the receiver is a microphone.

9. The wireless device of claim 1, wherein the filter stage further comprises a noise suppressor coupled to the first control signal and a signal mixer coupled to the second control signal.

10. The wireless device of claim 1, wherein the filter stage and the analysis stage comprise a digital signal processor.

11. The wireless device of claim 9, wherein the noise suppressor comprises a digital filter.

12. The wireless device of claim 1, wherein the output converting stage comprises an Inverse Fast Fourier Transform circuit and a digital to analog converter.

13. The wireless device of claim 1, wherein the filter stage enhances voice components and suppresses noise components in the digital input signal.

14. A method for suppressing noise in a wireless device, comprising:

receiving an analog input signal;

converting the analog input signal into a digital input signal;

filtering the digital input signal to generate a filtered digital signal corresponding to a first control signal and a second control signal, the first control signal having a filter coefficient and the second control signal having a signal-to-noise ratio value;

converting the filtered digital signal to a filtered analog output signal; and

analyzing the digital input signal and the filtered digital to generate the first and second control signals.

15. A wireless device, comprising:

a microphone operable to receive an analog input signal;

means for converting the analog input signal into a digital input signal;

means for filtering the digital input signal to generate a filtered digital input signal based upon a first control signal and a second control signal, the first control signal including a filtering coefficient and the second control signal including a signal-to-noise ratio value;

means for converting the filtered digital signal into a filtered analog output signal; and

means for analyzing the digital input signal and the filtered digital input signal to generate the first and second control signals.